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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,759	01/15/2002	Cheng Lee	23480-501	5139
29315	7590	07/02/2004	EXAMINER	
MINTZ LEVIN COHN FERRIS GLOVSKY AND POPEO PC 12010 SUNSET HILLS ROAD SUITE 900 RESTON, VA 20190				NOGUEROLA, ALEXANDER STEPHAN
		ART UNIT		PAPER NUMBER
		1753		

DATE MAILED: 07/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/047,759	LEE ET AL.
	Examiner ALEX NOGUEROLA	Art Unit 1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 21-24,26,28-30,36-41,43-47,53-59,61-66 and 70 is/are allowed.
- 6) Claim(s) 1-20,25,27,31-35,42,48-52,60, and 67- 69 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 15 January 2002 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All
  - b) Some \*
  - c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)              |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>07162002</u> . | 6) <input checked="" type="checkbox"/> Other: <u>IDS of 10082002</u> .                   |

**DETAILED ACTION**

***Claim Objections***

1. Claim 1 is objected to because of the following informalities: in the last line of the claim “on” should be -- one --.
2. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1-20, 25, 27, 31-35, 42, 48-52, 57, 58, 60, and 67-69 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention:
  - a) Claim 1, line 7: should -- at or near the -- be inserted between “position” and “gel” (see claim 21)?

- b) Claim 4 recites the limitation "wherein the first end of each of the one or more fluidic channels terminates in a fluidic separation channel" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim;
- c) Claim 4: are the one or more fluidic extraction channels and the one or more fluidic channels distinct from the one or more fluidic channels of claim 1?
- d) Claim 4: are the one or more outlet reservoirs of claim 4 the same as those of claim 1?
- e) Claim 4: is the high voltage power supply of claim 4 different from that of claim 1?
- f) Claim 13 recites the limitation "the outlet electrode" in line 1. There is insufficient antecedent basis for this limitation in the claim;
- g) Claim 14 recites the limitation "the outlet electrode" in line 1. There is insufficient antecedent basis for this limitation in the claim;
- h) Claim 15 recites the limitation "the outlet electrode" in line 1. There is insufficient antecedent basis for this limitation in the claim;
- i) Claim 16 recites the limitation "the outlet electrode" in line 1. There is insufficient antecedent basis for this limitation in the claim;

j) Claim 25 recites the limitation "the one or more microscale fluidic channels" in line 2.

There is insufficient antecedent basis for this limitation in the claim;

k) Claim 27 recites the limitation "the instrument" in line 1. There is insufficient antecedent basis for this limitation in the claim;

l) Claim 31 recites the limitation "the microfluidic channel" in line 2. There is insufficient antecedent basis for this limitation in the claim;

m) Claim 32 recites the limitation "the microfluidic channel" in line 2. There is insufficient antecedent basis for this limitation in the claim;

n) Claim 33 recites the limitation "the microfluidic channel" in line 2. There is insufficient antecedent basis for this limitation in the claim;

o) Claim 34 recites the limitation "the microfluidic channel" in line 2. There is insufficient antecedent basis for this limitation in the claim;

- p) Claim 35 recites the limitation "the proteolytic enzyme" in line 1. There is insufficient antecedent basis for this limitation in the claim;
- q) Claim 42 recites the limitation "the proteolytic enzyme" in line 1. There is insufficient antecedent basis for this limitation in the claim;
- r) Claim 48 recites the limitation "the microfluidic channel" in line 2. There is insufficient antecedent basis for this limitation in the claim;
- s) Claim 49 recites the limitation "the microfluidic channel" in line 2. There is insufficient antecedent basis for this limitation in the claim;
- t) Claim 50 recites the limitation "the microfluidic channel" in line 2. There is insufficient antecedent basis for this limitation in the claim;
- u) Claim 51 recites the limitation "the microfluidic channel" in line 2. There is insufficient antecedent basis for this limitation in the claim;

- v) Claim 52 recites the limitation "the proteolytic enzyme" in line 1. There is insufficient antecedent basis for this limitation in the claim;
  
  - w) Claim 57 recites the limitation "the capillaries" in line 1. There is insufficient antecedent basis for this limitation in the claim;
  
  - x) Claim 58: are the fluidic channels of claim 58 the same as the fluidic channels of claim 21?
  
  - y) Claim 60 recites the limitation "the plurality of fluidic channels" in line 1. There is insufficient antecedent basis for this limitation in the claim;
  
  - z) Claim 67: -- the first end of -- should be inserted between "place" and "the"; and
    - aa) Claim 69: a period (--) is missing from the end of the claim.
5. Note that dependent claims will have the deficiencies of base and intervening claims.

***Allowable Subject Matter***

6. Claims 21-24, 26, 28-30, 36-41, 43-47, 53-56, 59, 61-66, and 70 are allowed.
7. Claim 1 would be allowable if rewritten or amended to overcome the rejection under 35 U.S.C. 112, second paragraph, set forth in this Office action.
8. Claims 2-20, 25, 27, 31-35, 42, 48-52, 57, 58, 60, 67, and 69 would be allowable if rewritten to overcome the rejections under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
9. The following is a statement of reasons for the indication of allowable subject matter:
  - a) Claim 1: the nonobvious limitation in the combination of limitations is the requirement that the first end of the one or more fluidic channels be disposed through the apparatus cover and secured in position [at or near] the gel interface. In Clarke et al. (reference 4B in Applicant's IDS of July 10, 2002) the apparatus cover (left vial cap in Figure 1) is configured to completely seal the apparatus housing opening. So, if the apparatus cover is overlaid on the apparatus housing then gel protein extraction can not be performed because neither a fluidic channel end nor a power supply electrode can be disposed through the apparatus cover and into the apparatus;

- b) Claims 2-20 depend directly or indirectly from allowable claim 1;
- c) Claim 21: the nonobvious limitation in the combination of limitations is the requirement that the first end of the one or more fluidic channels be disposed through the apparatus cover and secured in position at or near the gel interface.. In Clarke et al. (reference 4B in Applicant's IDS of July 10, 2002) the apparatus cover (left vial cap in Figure 1) is configured to completely seal the apparatus housing opening. So, if the apparatus cover is overlaid on the apparatus housing then gel protein extraction can not be performed because neither a fluidic channel end nor a power supply electrode can be disposed through the apparatus cover and into the apparatus; and
- d) Claims 22-70 depend directly or indirectly from allowable claim 21.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX NOGUEROLA whose telephone number is (571) 272-1343. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NAM NGUYEN can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Alex Noguerola*

Alex Noguerola  
Primary Examiner  
AU 1753  
June 29, 2004